



# Malling Rural District Council.

GENTLEMEN,

I have the honour to submit to you my Report for the year 1913.

A memorandum from the Medical Officer to the Local Government Board suggests that the Reports of District Medical Officers should for the sake of uniformity follow certain broad lines, and should give some general information, useful to the Central Authority, which may seem superfluous when addressed to those who have an intimate knowledge of the District.

The Malling Rural District is bounded by the Districts of Dartford, Strood, Chatham, Hollingbourne, Maidstone Borough and Maidstone Rural, Tonbridge and Sevenoaks. To the West the Urban District of Wrotham is inset.

The character of the country is exceptionally varied for a locality of less than 40,000 acres. It includes the range of chalk hills on its northern boundary, with the belt of clay land at its foot. South of this belt comes a wide area of good agricultural land, largely under fruit and hops; this terminates in the lower range of Mereworth Hills with a good deal of sandy, well-wooded country of the Surrey type. South of this, again, is the flat country of the Weald, principally under hops, fruit and pasture.

There is a small and increasing industrial population near the Upper Medway at East Peckham, but the busy centres lie on the tidal banks of the river between Maidstone and Rochester, where the cement trade especially employs a very considerable population.

#### VITAL STATISTICS.

Census details include the following:—

. Cen	nsus, 1901.	Census, 1911.
Acres	,	38,146
Inhabited Houses	5,183	5,528
Population	24,709	24,205

The Population estimated to the middle of the year is 24,105. This estimate, based on the last two census returns, is probably too low, the last census having been taken at the end of a period of depression in the cement trade.

The BIRTHS registered during the year number 557, there being born 289 males and 268 females. Of these 525 were legitimate and 32 illegitimate.

The BIRTH RATE for the year is 23.1 per 1,000 of the Population, a slight increase on the preceding 5 years.

The Deaths numbered 305, giving a rate of 12.65 per 1,000 of the Population, the average for the past 5 years being 12.1.

The number of CHILDREN DYING UNDER 1 YEAR OF AGE is 60. This number includes 15 children who died from premature birth or other congenital defect during the first week of life. Summer Diarrhœa and Enteritis accounted for 9 deaths, and Respiratory Diseases for 10 more.

This return of 60 deaths is not quite so good as the last 5 years' average of 50, but is very much better than the preceding 10 years' average (1897-1906) of 126, with never fewer than 90 deaths in any one year.

DEATHS from the principal Zymotic Diseases numbered 23, giving a rate of .95 per 1,000 of the Population.

(			
	Whooping Cough Diphtheria Influenza	1 5 4	deaths.
		Scarlet Fever Whooping Cough Diphtheria Influenza	Measles         1           Scarlet Fever         1           Whooping Cough         1           Diphtheria         5           Influenza         4           Diarrhœa         11

No deaths were due to Typhoid Fever, nor to the other rarer diseases.

The following Tables of Vital Statistics are of interest:—

VITAL STATISTICS OF THE WHOLE DISTRICT DURING 1913 AND

PREVIOUS YEARS.

		Bir	ths.	Deaths.					
	Population			Under	r 1 year.	At all Ages.			
Year.	estimated to the middle of the Year.	Number.	Rate.	Number.	Rate per 1000 Births Registered.	Number.	Rate per 1000 of the Population.		
1908	24,357	606	24.9	57	94.0	291	11.9		
1909	24,306	553	22.8	55	99.5	321	13.2		
1910	24,256	530	21.9	40	<b>75·</b> 5	273	11.3		
1911	24,205	538	22.2	63	117.1	304	12.6		
1912	24,155	536	22.19	33	61.6	282	11.67		
1913	24,105	557	23.1	60	107.7	305	12.65		

Causes of and Ages at Death during 1913.

		Ä	AT S	UBJ	OIN	ED	AGE	IS.	
CAUSE OF DEATH.	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.		65 and upwards.
Other Defined Diseases 1 Diseases ill-defined or unknown	5			1 1 1 - 1 - 1 - - - - - - - - - - - - -					
TOTALS 3	319	60	5	11	15	9	28	57	134

# SANITARY CIRCUMSTANCES.

Water Supply.—The main supply for the District comes from deep borings into the lower Green Sand at Halling. To meet the increasing demand the Mid-Kent Water Company have this year completed a new Pumping Station.

The supply is constant, plentiful and pure, though the water is hard.

Out of a total of 5,528 houses in the District (the figures given in the last census return) 4,144 receive a domestic supply; and 265 meters are in use. Nearly half the Hopper Camps receive their supply of water by meter from the Company.

Well and rain water still form the principal sources of supply in certain outlying, sparsely-populated parts.

Shipbourne has an excellent private supply, under private control.

East Peckham is so scattered a Parish that, though the mains pass through, only a small proportion of the houses receive the supply. The majority of houses get their supplies from shallow wells, which are, of course, specially liable to become contaminated. Such samples, however, as have been analysed are mostly satisfactory.

Of 264 houses inspected during the year under the Housing and Town Planning Act, 190 were supplied by the Company, 70 were dependent upon wells and 4 upon rain water. As, however, the worst houses in the District are first receiving attention, these figures do not indicate the usual proportion as to source of water supply.

Excepting on the few occasions when the pipes are being cleared, or other necessary work is in progress, the water is clear and palatable.

The Chemical Analyses are very uniform and altogether satisfactory.

The following Table gives the result of nine Analyses taken during the year.

The samples are taken from various parts of the District. The figures represent parts per 100,000.

Year 1913.	Average.	Maximum.	Minimum.
Albuminoid Ammonia Oxygen absorbed in 15 minuites Oxygen absorbed in 4 hours Total Solid Residue Chlorine Nitrogen as Nitrates and Nitrites Temporary Hardness Permanent Hardness	·0003 ·0005 ·0002 ·006 23·58 1·79 — 7·93 3·33 11·27	·001 ·001 ·002 ·009 24·40 1·85 ·159 8·47 3·64 11·62	None. ·0004 None. ·003 22·0 1·70 Trace. 7·42 2:73 10·92

# SEWAGE AND REFUSE DISPOSAL.

West Malling.—The Sewage Disposal Works at Ryarsh are clean and in good order, and give rise to little or no nuisance; though passing the works almost every day I have detected nothing.

Dry scavenging by open cart is undertaken by a Contractor, who calls once in 14 days. The scavenging should be done weekly with a properly covered cart.

AYLESFORD AND BURHAM.—The condition of the disposal works here is again more satisfactory. Their proximity to the Maidstone Works makes it a little difficult to distinguish at times whence any smell comes, but I have usually been able to satisfy myself that the Aylesford and Burham Works are not at fault.

SNODLAND.—Here the outfall works are of the same primitive character, the effluent being discharged beneath a cascade into tidal waters after being treated by screening tanks. Considerable improvements in connection with these latter are in progress. Weekly dry scavenging should be undertaken here also in place of the fortnightly round now contracted for.

East Malling and Ditton.—Scavenging by cart disposes of the sewage and refuse in these Parishes, where cesspools or pail closets are mainly used.

Complaints of delay in emptying cesspools, and of the nuisance caused by the scavenging carts have been numerous, and in some instances, I think, well founded. In June I made the following Report:—

"I have to report to you that the cart system for the disposal of sewage and house refuse in East Malling and Ditton is not working satisfactorily.

This is in the main due to two causes:

1. Economy of Labour.

2. Difficulty in obtaining convenient sites for the disposal of sewage and refuse.

The best remedy would be the adoption of a sewage scheme for the two Parishes; failing this, I see no reason why the present system should not be made fairly satisfactory, provided that the site difficulty can be solved.

I would suggest the appointment of a Committee of those principally interested to deal with the situation."

The result has been the appointment of a local Committee, and the whole work is to be under fresh management from the beginning of the year 1914.

Also, the opinion of many in the locality is that all wet scavenging work should be done at night, that the day work is offensive, and especially likely to injure the public health. Day removal is without doubt offensive, but in other respects it has many advantages over a system of night removal, and it is not, I consider, more likely to injure the general health.

The difficulty of obtaining suitable sites for the deposit of liquid refuse has always been a trouble, especially at certain times of year. This matter is receiving the special attention of the Committee with, I understand, a satisfactory result.

WOULDHAM.—Here the combined system of scavenging continues satisfactorily.

GENERAL.—Other villages and scattered houses deal with their own sewage and refuse.

Midden privies are slowly diminishing in number, earth or pail closets being usually substituted. It is, however, extremely difficult to get these latter properly used, and unless properly used they are hardly better than the old middens.

Of the 766 houses inspected under the Housing and Town Planning Act during the four years in which the Act has been operative

412 have water closets,

198 ,, pail or earth closets,

156 " midden privies.

In the whole District, however, the proportion of water closets is very much larger than that represented by the above figures.

MAIDSTONE SEWAGE DISPOSAL WORKS, near Aylesford, caused considerable offence during the hot summer months, and again on several occasions during November. Renewed effort to diminish the nuisance in every way possible should still be pressed for.

THE SANITARY CONDITION OF SCHOOLS is the subject of a Special Report by the County Medical Officer in his capacity of School Medical Officer.

#### FOOD SUPPLY.

DAIRIES AND COWSHEDS.—All milk consumed is produced within the District and supplies are sent away both to neighbouring towns and to London.

Dairies and dairy utensils are as a rule well-kept and cowsheds are fairly satisfactory, but the conditions under which milking takes place are distinctly bad, and I should be glad to see my suggestions of last year enforced, namely, that the Sanitary Inspector should be instructed to report every case to the Council in which he found that the very mild Milking Regulations were not being strictly followed. The use of the Tuberculin test for the examination of milch cows before they are admitted to the herd is quite exceptional.

Under the "Diseases of Animals' Act," Tuberculosis Order, 1913, nine cows suffering from tuberculosis in an advanced or dangerous form were destroyed.

FOOD SUPPLY OTHER THAN MILK has been on the whole satisfactory, the Assistant Inspector employed during the Hop-picking season was particularly useful in this respect, and I hope he may be engaged again.

Two prosecutions were undertaken, one by the Sanitary Authority of a hawker, for exposing for sale 272 loaves of bread quite unfit for human food, and one by the police of a licensee for selling adulterated brandy. Both prosecutions were successful.

Under the Sale of Food and Drugs Act, 117 samples were taken:—

40 of milk.

20 of butter.

10 of margarine.

20 of spirits.

27 of various groceries, etc.

Several cautions were administered where milk was found to be slightly deficient in fat, but no prosecutions were warranted with the exceptions above mentioned.

Housing and Town Planning, etc., Act, 1909.—The arrangement adopted by the Committee appointed to administer the above Act is that the Sanitary Inspector should systematically visit the houses and should call in the Medical Officer of Health in all cases in which difficulty arose. This course prevents duplication of work and proves satisfactory in other respects.

Number of Houses inspected under the Act during the year under review	264
Number of houses which on inspection were found to	201
be so dangerous or injurious to health as to be	
unfit for Human Habitation	24
Number of representations to Local Authority with a	
view to making Closing Orders	0
Number of Closing Orders made	0
Number of houses the defects in which were remedied	
without the making of Closing Orders	13
Number of houses now the subject of negotiations	
with owners with a view to avoiding the necessity	
for Closing Orders	11
Number of houses found on inspection not to be so	
dangerous or injurious to health as to be unfit for	
Human Habitation yet presenting serious sanitary	
or structural defects	96
These 96 houses either have been or are being, or are	
about to be put in order.	
General character of defects found:	
Defective closets	33
Defective or insufficient drainage	77
Internal defects	95
External defects	87
Defective paving	78
Dirty dwellings	38
Insufficient light and ventilation	5
Unsatisfactory water supply	2

As is shown by these returns, the houses for the Working Classes are receiving particular attention. In some instances houses are being improved by the owners on their own initiative, but more often as the result of representations from the Sanitary Authority.

The following houses have been erected during the past three years:

	Estimated value over	Estimated value under	
	£16 per annum.	£16 per annum.	Total.
1911	4	16	20
1912	13	15	28
1913	7	16	23

Four Workmen's Cottages are being erected under the Act at Mereworth, these will make a total of 10 built during the past two years in the parish.

In the purely agricultural parts of the district it is quite exceptional to come across an empty house, and any new houses that are built are at once taken up without apparently affecting the occupation of the older ones. In those parts, especially where the land is coming under closer cultivation with fruit, more houses could be built with advantage.

The Supervision of New Buildings is undertaken by the Sanitary Inspector in his capacity of Building Surveyor; he is also responsible for the issuing of certificates before occupation.

There was no occasion to take proceedings with respect to any case of overcrowding.

FACTORY AND WORKSHOP ACT, 1901.—There are on the Register 20 Factories and 113 workshops, a total of 133.

There are two underground bakehouses.

Your Sanitary Inspector reports 339 Inspections. There were defects found in 16 cases, these were in all instances satisfactorily dealt with.

THE MIDWIVES' ACT now being administered by the County Authority is the subject of a Special Report by the County Medical Officer.

I note your decision not to adopt the Notification of Births Act for the present.

SANITARY ADMINISTRATION OF THE DISTRICT.

The Staff consists of:

- 1. Medical Officer of Health.
- 2. Sanitary Inspector, who is also Surveyor of New Streets and Buildings.

3. Isolation Hospital Staff, the permanent members of which are (1) matron; (2) staff nurse; (3) probationer; (4) hospital porter; (5) cook; (6) wardmaid. Laundry workers are engaged as required; additional nurses also, either from the Kent Nursing Institution or elsewhere.

# Hospital accommodation consists of :-

- 1. An admistration Block.
- 2. Block A with a ward for 4 patients and an observation ward for 1 patient.
- 3. Block B with two wards, each with accommodation for 6 patients.
- 4. Block E with two wards, each with accommodation for 4 patients.

The Hospital is used almost exclusively for the treatment of Scarlet Fever and Diphtheria. Small pox cases, if they occur, are treated in Block E which is well away from the other buildings.

This year a case of Cerebro Spinal Meningitis was also admitted.

Ninety-nine cases of Scarlet Fever and 22 cases of Diphtheria have been admitted during the year. On January 1st, 1913, there were in Hospital 14 cases of Scarlet Fever and 5 of Diphtheria, making a total of cases under treatment during the year 141 including the case of Cerebro Spinal Meningitis above mentioned.

The average stay in Hospital of each Scarlet Fever case is 46 days and of each Diphtheria case 33 days.

There occurred one death from Scarlet Fever and three from Diptheria.

The case of Cerebro Spinal Meningitis also ended fatally.

It will be realised from the above statement that the Staff have been worked at full pressure throughout the year and they have responded well. The daily "time off" has for a good part of the year been the exception rather than the rule, and only so much off time has been taken as has been absolutely necessary for health. On the Matron the pressure has been particularly severe since in her times of leisure she has so frequently felt it her duty to relieve one of the younger nurses in the wards.

168 houses have been disinfected by the Hospital Porter in addition to several School buildings.

The following table is a record and is interesting also for purposes of comparison:—

.1.	.IstoT	4	က	4	4	0	23	5	0	<del>!</del>	4
ospita	Small Pox.	0	0	0	0	0	0	0	0	0	0
in H	Typhoid Fev.	0	0	0	0	0	0	4	0	0	0
Deaths in Hospital.	Diphtheria.	2	-	-	2	0	Н	0	0	0	က
	Scarlet Fever.	22	67	က	23	0	H	-	٥		Н
All Causes. Total.	.snoissimbA	104	195	16	62	7.1	42	41	25 45	137	121
All Ca	Cases. Notified.	123	236	253	104	105	74	51	61	220	150
Pox.	.anoisaimbA	0	0	0	0	0	0	0	0	0	0
Small Pox.	esesO SpanitoN	0	0	0	0	0	0	0	0	0	0
Fever.	.anoissimbA	0	0	0	0	Н	0	18	<del></del>	0	0
Typhoid	SaseO. SefitoN	5	23	10	_	19	က	22	$\infty$	$\vdash$	73
leria.	.anoisaimbA	43	72	29	30	24	28	2	12	26	22
Diphtheria.	Casea. Notified.	54	1(2	98	55	က	55	12	27	39	30
Fever.	.anoissimbA	61	123	61	31	46	14	15	21	111	66
Scarlet Fever.	saseO beditoN	64	132	156	41	55	16	16	26	180	118
	YEAR.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913

The following Adoptive Acts, Bye-laws, Regulations, etc., are in force in the District:—

ADOPTED ACTS.

Infectious Diseases (Prevention) Act, 1890.
Public Health Acts Amendment Act, 1890 (certain clauses relating to Rural Districts).
Public Health Acts Amendment Act, 1907.

Bye-Laws, Regulations, Etc. Cleansing, etc., and Removal of Refuse (P.H. Act, 1875, s. 44).

Tents, Vans, Sheds, etc. (H.W.C. Act, 1885, s. 9 (2)).

Public Mortuaries (P.H. Act., 1875, s. 141). At Aylesford only.

Hop-pickers and Fruit-pickers (P.H. Act, 1875, s. 314, and P.H. (Fruit Pickers Lodgings) Act, 1882).

New Streets and Buildings (P.H. Act, 1875, s. 157, and P.H.A.A. Act, 1890, s. 23).

Regulations under the Dairies, Cowsheds and Milkshops Order, 1885.

The County Bacteriological Laboratory is extending its work, and is proving to be of the greatest assistance both to me, as a Medical Officer of Health, and to the General Practitioners in the District.

Outfits for sending specimens direct to the Laboratory have this year been provided to all practitioners requiring them. A large number of specimens have been examined for the presence of tubercle, typhoid, diphtheria and ringworm; and in rarer instances specimens for exceptional conditions such as cerebrospinal fever have been sent for examination.

Under the Act for the Compulsory Notification of Infectious Diseases there were reported 159 cases.

The following Table gives an analysis of the cases reported during the past 10 years:—

Year.	Scarlet Fever.		Typhoid Fever.	Puer- peral Fever.	Small- pox.	Erysi- pelas.	Cerebro Spinal Fever.	Total.
1904	64	54	5	0	0	22	0	145
1905	132	102	2	4	0	21	0	261
1906	156	86	10	1	0	28	0	281
1907	41	55	7	1	0	32	0	136
1908	55	31	19	1	0	11	0	117
1909	16	55	3	2	0	13	0	89
1910	16	12	22	2	0	S	0	60
1911	26	27	8	1	0	8	0	70
1912	180	39	1	2	0	8	0	230
1913	118	30	2	1	0	6	2	159
10 years' average.	80.4	49.1	7.9	1.5	0	15.7	•2	154.8

It will be noticed that there were a very considerable number of cases of Scarlet Fever reported, 118 in all, the parishes principally affected being East Malling and Snodland.

East Malling suffered from a sharp outbreak in May and June. The first case notified (May 7th) was that of a child living at the Ship Inn, and attending East Malling School. On visiting the School I found another child with some peeling, and on enquiry, got a history of preceding sore throat, but the rash, if any, was overlooked. This child may have started the epidemic, though she was not in the same class as the case notified. From this time on cases continued to be reported, and it became necessary to close the School.

Thirty-one cases were reported during May and June.

The School was thoroughly disinfected, and re-opened on June 16th. Certain sanitary defects had been previously reported upon in connection with the School, and these are, I understand, to be remedied at least in part.

The milk supply and other sources of infection had been excluded.

A further small outbreak occurred in October and November, but of the 9 cases notified 6 occurred in one house amongst the children of one family. It was satisfactorily arrested.

Snodland was attacked in November and December, 18 cases being notified during the 2 months. Several children attending the National Church of England School were attacked in quick succession, and on visiting I found a child in the class principally affected in the peeling stage of Scarlet Fever, and with an infectious ear discharge. This particular class-room was promptly closed and disinfected. Subsequent cases occurred in the Town, but of these only 2 were attending the National Church of England School.

There is, I think, no doubt that School influences have been principally responsible for these two outbreaks, and for other minor outbreaks that have occurred. The mild character of many cases causes the nature of the disease to be overlooked by parents, and children return to School when still in an infectious state. Surrounding districts have also suffered considerably during the year, and the ease of inter-communication between them facilitates the spread of infection.

The organisation for the prevention of spread of infection is as follows:—

Cases are reported as soon as seen by a Doctor. Doctors are now asked to state on their notifications name, age, sex and address of the patient, also whether the patient is willing to be removed to the Isolation Hospital, and if of School age, what School he attends.

The School is notified of the case, the patient, if willing, is removed to Hospital, and the house is disinfected. Enquiries as to the source of infection are then made in the usual way, and any clue found is followed up.

School Teachers also have instructions to obtain Doctors' Certificates in any cases of suspicious illness occurring amongst the scholars.

DIPHTHERIA.—The number of cases reported, 30, is somewhat below the average. Half of the 30 cases came from the villages of Larkfield and New Hythe. Seven of these occurred in January and formed the end of an epidemic outbreak amongst the School children attending New Hythe School, particulars concerning which were given in my last Report. With the exception of one case in August the neighbourhood remained free till November. During the two months of November and December seven cases occurred, these, however, could not be traced directly to School infection. The first three cases occurred amongst scholars, but the three children were of different ages and were in different rooms. Beyond defective drainage at some of the affected cottages, the only clue discovered was the presence of one carrier case, a child, who was living in the batch of houses principally affected.

The precaution was taken of disinfecting the School during the Christmas holidays, and the outbreak subsided.

It should be mentioned that the Schools are exceptionally good, sanitary, and well kept.

Of Typhoid Fever, 2 cases only were reported, one from Snodland in January, and one from West Malling in July. Neither case presented features of exceptional interest.

Two cases of Cerebro Spinal Meningitis (Spotted Fever) were notified. In case No. 1 the diagnosis was doubtful, and the bacteriological examination was on the whole against it. Case No. 2 came from a neighbourhood in which some cases of the disease had occurred. The patient came home ill, was nursed for a time at home till the nature of the illness was diagnosed. She was then removed to Hospital, and both house and persons connected with the case were disinfected.

Measles, Mumps, Whooping Cough, and Chicken Pox were prevalent in certain parts of the District, and it became necessary to close the following Schools for a time:—

For Measles: St. Michael's, East Peckham... Feb. and March.
Burham Infants ... May and June.
Shipbourne Infants ... June and July.

Whooping Cough: West Malling Infants ... December.

EPIDEMIC DIARRHEA and Enteritis caused the death of 10 children under two years of age, and this notwithstanding the fact that meteorological conditions at the time of epidemic prevalence were not unfavourable.

I again quote from my Report for 1911:—

"It is desirable that you should consider what can be done to anticipate an outbreak.

Such measures as more frequent scavenging of dry refuse during the summer months, and more strict and frequent inspection of dairies and milk and other food supplied would suggest themselves. Assistance for the Sanitary Inspector during August and September is also indicated."

The employment of an Assistant Inspector last summer met these suggestions in part, but nothing has been done so far with regard to the scavenging.

Prevalence of and Control over Tuberculosis.—The new Public Health (Tuberculosis) Regulations dealing with the Compulsory Notification of all forms of Tuberculosis came into force in February.

There have been notified during the year 52 cases of Pulmonary and 19 cases of other forms of Tuberculosis, a total of 71 cases.

Of these 71 cases 11 were for a time inmates of Malling Union Infirmary.

In all, 198 visits were paid to the remaining 60 cases.

Twenty Tuberculous houses were disinfected.

The work of the Health Visitor has been greatly appreciated by the sufferers. The routine procedure includes the following:— On receiving notice of a fresh case, particulars are at once forwarded to the Health Visitor. A weekly statement is also sent to the Central and to the County Authorities.

On visiting the patient for the first time defects in sanitation, mode of living, etc., are noted, general hygienic advice is given, and enquiries are made as to employment, the presence of contact cases, etc.

Where necessary sputum flasks, paper handkerchiefs, etc., are supplied free of cost.

Subsequent visits are paid according to the necessity of the case, and all patients are kept under observation till they are cured, die, or remove from the District. The house is then disinfected.

The Tuberculosis Dispensary at Pudding Lane, Maidstone, is taken advantage of by a few patients, and it is proposed in the coming year to bring branch dispensaries within easier reach of the various centres in the District. By means of the Dispensary and by means of enquiries made when visiting and examining school children additional endeavour is made to discover fresh contact cases in the early and curable stage.

Medical Inspection of Schools and School Children.—The systematic inspection of children attaining the ages of 5 and 13 during the year 1913 has again been undertaken. This being the 5th successive year of such examinations all children aged 5, 6, 7, 8, 9, 13 and 14 have been thoroughly overhauled once and children aged 10, 11 and 12 have been examined where special defects are interfering with progress at school.

Much good results where parents can be persuaded to seek advice for the defects discovered on examination and it is a pleasure to hear from the teachers how much certain children have developed physically and mentally since such or such a defect has been remedied. There are, however, a proportion of children whose parents either cannot or will not seek advice, and for these some aid organisation might very usefully be started. Managers are in some parishes following up these cases at the request of the Kent Education Committee, but much more needs to be done, and many children now leave school with curable defects unremedied; defects which have sometimes handicapped them throughout their school career.

FRUIT AND HOP-PICKING SEASONS.—There is a small but increasing number of casual workers who come into the District in early summer for fruit picking and other work, and who here and there occupy hopper houses or other buildings.

These workers already need some supervision by the Sanitary

Authority and will need more.

Hop-picking commenced this year during the first days of September in wet weather, there was more wet with occasional heavy rain about the middle of the month, but the weather was on the whole fairly fine and it was cool throughout.

There was a decided improvement in the accommodation

provided, and in the care of the camps.

The food supply was upon the whole satisfactory and it was only necessary to prosecute in one case for selling food unfit for human consumption. Constant supervision of this supply is very essential and the Assistant Inspector justified his employment for this purpose alone.

In August I made the following report:

To the Malling Rural District Council.

GENTLEMEN,

As the result of your instructions given to me in July, I have with your Sanitary Inspector made a detailed inspection of farms in your District where immigrant Hop-pickers are employed, and I herewith submit to you my Report.

The number of immigrant or foreign Hop-pickers employed last year was approximately 6,196. Pickers dependents, children and others, would about double the numbers, so as nearly as can be ascertained, accommodation has to be found for 12,392 souls. In alloting space 2 children under 10 years are counted as 1 adult.

I propose to deal with the subject under the following headings:—

1. Situation of Camps.

2. Accommodation for living and sleeping.

3. Water supply.

4. Cooking and drying facilities.

5. Latrines.

6. Scavenging arrangements.

#### 1. SITUATION OF CAMPS.

The sites available on most farms are of necessity restricted and the ideal site on open ground with land sloping away from the front of the huts is rarely found.

On some farms the plan is adopted of building rows of huts from 6 to 20 in number on different parts of the farm, and this is I think the best plan to adopt provided the water supply is plentiful: it is more sanitary, and I am informed that the pickers are more easily controlled.

The old plan of building huts on 3 sides of a square with possibly a cookhouse on the fourth side, is not desirable, the square soon becomes fouled and offensive.

The matter in this connection which needs special attention is that of overcrowded sites. On one farm in particular, Godwell Farm, Offham, there is great concentration. On a space roughly estimated as an acre, there are 87 huts, besides cookhouses, closets, etc., and I know that in past seasons tents have been crowded into the same space, or on to space immediatly adjoining This camp accommodates between 500 and 600 persons and becomes badly fouled as the season advances.

## 2. ACCOMMODATION FOR LIVING AND SLEEPING.

Many of the modern huts built of brick with raised floors, and in some cases with a damp course, are excellent, so also are many of the more substantial wooden huts, notably those at Whites Ltd., Beltring. I believe also, many of the old roomy huts with hard earth floors are in great request amongst the regular immigrants.

The wooden "bathing machine" huts so largely introduced of late years are satisfactory when kept in good repair.

Criticism offered in the course of inspection of buildings, and principally to do with dilapidations, want of ventilation, and earth floors below the ground level, some such huts were noticed, with the fall of the ground towards the hut entrance, and no guttering had been provided to take the roof water.

On the whole, I consider the hut accommodation throughout the district is satisfactory, repairing, cleaning, and limewashing, was in evidence at the time of my visits, in preparation for the coming season.

Tents are still extensively used. In only a few instances could I see them, they were mostly stored away.

My views on the use of tents I have set forth repeatedly in my Annual Reports: briefly they should not be used for children under any circumstances, and the Bye-laws as to the clean, dry, and water-proof condition of tents, should be strictly and quickly enforced.

Sheds and barns are not extensively used, they are apt to be ill-lighted and draughty, yet ill-ventilated.

A good number of Gipsy House carts are put up on some farms, their estimated number last year was 58.

Bedding supplied is, as a rule, good and plentiful. In some few huts trestle arrangements are introduced, but, as a rule, the beds are made from a lower thick layer of faggots or hopbine, or both, and an upper layer of straw, and this combination is very satisfactory.

Taking the floor space of 16 square feet per adult person as adequate, there appeared on most farms to be ample room provided, and in those cases where the accommodation seemed likely to be insufficient, further provision was promised.

Where in the past I have found overcrowding it has often been found that the occupants of various huts and tents have re-arranged themselves, or the rightful occupants have received visitors for a short time, often week-end friends from Town.

#### 3. WATER SUPPLY.

Upon 18 farms the camps receive their principal supplies from the Mid Kent Water Company, either directly through the mains, or by means of water barrels, the barrels being carted to the Camps from the nearest tap. Upon 25 farms the Camps are supplied from adjacent springs, or from wells. Upon 1 farm, Crowhurst Farm, at East Peckham, the supply is from a ditch, whence the water is passed through a filter into a tank, such at least was the arrangement described to me, though I was unable to see the filter.

The quality of the water supplied is generally good and in almost every case residents drink from the same source throughout the year.

In some instances pickers have to go what appears to me to be an unreasonable distance to obtain their water. I consider it should be stated in the Bye-laws, that unless a proper water supply is obtainable within a given distance, it should be supplied to the camp by barrel. I suggest as a reasonable distance that the double journey should not exceed a quarter of a mile, that is, 220 yards each way.

#### 4. Cooking and Drying Facilities.

The cookhouses are either permanent structures built of brick, or more or less temporary erections of galvanized iron.

On several farms the number was insufficient, the insufficiency being justified on the ground that the pickers will not use them when provided.

Growers have no specified guide as to the number of cookhouses required per 50 or 100 persons.

#### 5. Latrines.

Privy accommodation is, generally speaking, distinctly bad. I dealt with this matter fully in my last Annual Report.

In the course of inspection I have endeavoured to impress upon growers the necessity for decent accommodation, for obvious notices as to which closets are for men, and which for women, and for thorough and frequent attention both to the closets and to the approaches to them by a specially appointed scavenger.

When necessary, and where permanent buildings have not already been erected, I have suggested the type of privy which appeared to me both the simplest and most efficient.

Here again no guide is given in the Bye-laws as to the type of closet desired, neither is it stated how many closets should be provided. A camp of 30 persons should have 2 closets for women, and 1 for men, but a camp of 300 would not of course need 10 times as many.

### 6. SCAVENGING ARRANGEMENTS.

On very large farms a whole-time man, or a man and a night watchman are employed, but, as a rule, the scavenging is not properly attended to, and sometimes it has appeared to me that it is not done at all.

Scavenging should be carried out daily on every camp, by a whole-time or part-time man specially appointed for the work, and especial attention should be given to the closets, and to the approaches thereto, and where spring water is used by the pickers, instructions should be given that the spring and the approaches thereto, should be kept free from abuse.

Finally, I have found those whom I have met usually willing to give effect to any suggestions made.

The Sanitary Inspector who accompanied me throughout has an intimate knowledge of the different camps, and he, with the Assistant Inspector, will be making frequent visits to see that the improvements promised have been carried out, and especially to see that the camps are kept in a more sanitary state than formerly. On a good number of farms very little attention will be required, the pickers already receive every consideration, but there are some which need continual supervision. I do not think that at present I have to ask you to take action in any case, though I think a letter is desirable from the Council to Mr. Wm. Livett, of Highfield, Pembury, asking that he should give immediate attention to the condition of his huts, and of other accommodation provided, and especially to the question of a pure water supply on his Crowhurst Farm at East Peckham.

In the course of inspection the following approximate figures were obtained and are of interest.

Number	of	immigrant pickers	employed	6196
, ,	,,	dependents	•••	6196
			Total	12392

Number			 		 1407
,,		sheds	 • • •		 52
,,		tents	 * * *		 334
, ,	"	carts	 • • •		 58
				<i>0</i> 0 - 1 - 1	1071
				Total	1851

I am, Gentlemen,

Your obedient Servant,

ARTHUR H. ROBERTS.

August 26th, 1913.

It would be well to send a copy of this Report to every Hop Grower in the neighbourhood.

I have the honour to remain, Gentlemen,

Your obedient Servant,

ARTHUR H. ROBERTS.

March 2nd, 1914.

## WEST MALLING,

February 15th, 1914.

# To the Malling Rural District Council.

### GENTLEMEN,

I have the honour to submit to you my Report for the year 1913 in respect to my duties as Inspector of Nuisances, Inspector under the Housing and Town Planning Act, 1909, Inspector of Dairies and Cowsheds, Inspector of Factories and Workshops, Inspector of Canal Boats, also as Surveyor of New Streets and Buildings.

#### NUISANCES.

Accumulation of Refuse						136
Drains Blocked	• • •	• • •	• • •			101
Defective Sinks and Was						23
Defective and insufficient			• • •	• • •	• • •	97
Defective Roofs and Gut		• • •	• • •			41
Defective Flooring				• • •	• • •	31
Dirty Dwellings		• • •	• • •	• • •	• • •	36
Defective Paving			• • •	• • •	• • •	43
Dirty Cowsheds	• • •	• • •	• • •			3
Dirty Dairies				• • •	• • •	3
Dirty Bakehouses		• • •	• • •	• • •	• • •	10
Dirty Slaughterhouses	• • •	• • •	• • •		• • •	4
Houses unfit for Habitat		• • •		• • •	• • •	1
Insufficient Water Suppl	y		• • •	• • •		2
Insufficient Cesspools	• • •	• • •	• • •	• • •	• • •	6
Insufficient and Defective			• • •	• • •	• • •	66
Keeping Animals so as to		sance	• • •	• • •	• • •	20
Overcrowding			• • •	• • •	• • •	5
Overflowing Cesspools			• • •		• • •	81
Overflowing Privies		• • •	• • •	• • •	• • •	54
Other Nuisances not enu	imerated	• • •	• • •	• • •	• • •	14
•					Total	777
					10001	

I have served 305 informal notices and 17 Statutory notices for the abatement of nuisances enumerated. I have met the owners on the property in respect to structural defects, and the same have, with the exception of two or three cases, been satisfactorily dealt with. The work in respect to the excepted cases is now being proceeded with.

With respect to the dwelling scheduled as unfit for habitation (at Blue Bell Hill in the Parish of Burham), the owner has obtained an ejectment order against the occupier, and directly possession is obtained, the owner intends to have the cottage fit for habitation.

# HOUSING AND TOWN PLANNING ACT, 1909.

I have inspected 264 houses as against 239 houses in 1912, and have, up to the end of the year, inspected in all 766 houses. I made 223 re-inspections of the several houses inspected in 1912, where the defects had not been remedied, with the result that the whole of the properties scheduled in 1912 have been made reasonably fit for habitation without any statutory notices being served.

During the year I have made in all 1,389 inspections and re-inspections. I have also written 113 letters to owners, setting out particulars of defects, and have also met the several owners or their agents on the premises, with the result that the work of remedying defects in most cases is being proceeded with.

Of the 264 houses inspected, I found 48 satisfactory and 216 with defects as scheduled:—

### DEFECTS UNDER THE HOUSING ACT.

Defective closets	• • •	• • •	• • •			33
Defective and insuffic	ient dra	ainage				77
Internal defects	• • •	• • •	• • •	• • •	• • •	95
External defects	• • •	• • •			• • •	87
Defective paving	• • •	• • •		• • •	• • •	78
Dirty dwellings	• • •	• • •	• • •	• • •		38
Insufficient light and				• • •	• • •	5
Unsatisfactory water	supply	• • •	• • •	• • •	• • •	2
F173					C.	
Total	• • •	• • •				425

My monthly reports to your Committee of the Housing and Town Planning Act show the source of water supply, also form of closet accommodation, and also the parishes in which inspections have been made during the year. I herewith submit a summary:

#### Source of Water Supply—

190 houses are supplied by the Mid Kent Water Company
70 ,, ,, ,, Wells
4 ,, ,, ,, ,, Rainwater

#### PRIVY ACCOMMODATION—

138	houses	have	Waterclosets
5	,,	,,	Earth closets
52	,,	,,	Pail closets
69	,,	,,	Midden privies

The 264 houses reported upon were inspected in the following

parishes:—

isnes:—					
Aylesford		 		 • • •	18
Addington		 		 	2
Birling		 	• • •	 • • •	7
Burham		 		 	20
Ditton		 		 	8
East Malling		 		 	103
Peckham, We	est	 2 * *		 	9
Ightham		 		 	12
Ryarsh		 		 	1
Snodland		 		 •	30
Trottiscliffe		 		 	10
West Malling		 		 	16
Wateringbury		 		 	28
0 0					
	Total	 		 	264

WORKMEN'S COTTAGES—

In accordance with instructions of the Council I prepared plans and specifications for four cottages at Kent Street, Mereworth, to be erected under the Housing and Town Planning Act; the buildings are in progress and should be ready for occupation early in May, when completed the Council will then have built ten houses in the parish of Mereworth.

SCAVENGING.

SNODLAND.—The dry scavenging in this parish is done every 14 days and the contract has been carried out satisfactorily.

I reported last year that it would be a great improvement if the

scavenging was done weekly, I am still of that opinion.

The Council have provided a Sanitary Van for the carting of the refuse, as suggested in my last report, which is a great improvement on the open van provided by the Contractor.

The Scavenging Contractor reports show that during the year he has scavenged 1,361 loads as against 1,261 loads of refuse in the

previous year.

I submit Table showing the quantity of refuse removed in the past 3 years, with the cost of same:—

Year.	Quantity.	Cost.
1911	1,641 Loads, Cart	£ s. d. 120 0 0
1	1,261 ,, Van	
1913	1,361 ,, ,,	129 0 0
Totals	4,263 Loads	379 0 0

£379 as against £370 in the previous 3 years.

Drainage.—In accordance with instructions of the Council I prepared amended plans and specifications for alterations and improvements at the Outfall Works. These were referred to the Snodland Sanitary Committee, and the work is now proceeding.

The Sewers are regularly flushed by nine 200 gallon automatic flushing tanks, which discharge twice daily, and also from 4 hydrants.

WOULDHAM.—The combined system of scavenging is carried out in this parish by Contractor, and the work has been carried out in a satisfactory manner.

I append Table showing summary of work done, together with cost of same for the past 3 years.

#### SUMMARY:—

Year.	Loads from Cesspools.	Cesspools pumped out.	Loads from Privies.	Number of Pails Emptied.	Loads of Refuse.
1911	44	4	131	10,011	452
1912	50	5	139	10,054	486
1913	356	4	82	11,033	447
Totals	450	13	352	31,098	1,385

Year.	Cost.			
1911	£124 0 0			
1912	£128 0 0			
1913	£128 10 0			
Total	£370 10 0			

East Malling and Ditton.—The work of scavenging these parishes is done by direct labour, the Council contracting for horse hire, but the Council have decided to purchase horses, and deal with the whole of the work by a Committee appointed for that purpose. I reported last year the difficulty in obtaining places for the deposit of the liquid sewage, especially during wet weather, and when the fields are laid down for hay; and also the advantage it would be to have an emergency site in each parish. I understand the Committee have adopted by suggestion, and have obtained emergency sites.

I submit details of scavenging done, together with the cost of same for the past 3 years. The increase of cost is not only due to the long journeys taken to dispose of the refuse, but also to the great increase in the Contract for horse hire:—

# SUMMARY OF SCAVENGING.

Year.	Loads from Cesspools.	Cesspools pumped out.	Loads from Privies.	Loads from Earth Closets.	Number of Pails Emptied.	Loads of Refuse.
1911	1,599	94	282	875	10,266	452
1912	1,557	122	280	820	10,170	526
1913	2,242	126	316	876	10,407	746
Totals	5,398	342	878	2,571	30,843	1,724

The cost of horse-hire and labour for 1913 was as follows:-

	March.	June.	September.	December.	Totals.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Horse Hire	104 7 0	108 10 0	132 3 0	144 0 0	489 0 0	
Labour	44 4 7	44 10 10	48 13 4	53 7 10	190 16 7	
Totals£	148 11 7	153 0 10	180 16 4	197 7 10	679 16 7	
Add Bonus to Foreman 5 0						
Total £ $684$						

The cost for the past three years:—
SUMMARY.

Year.	Cost.				
1911	£419 18	5			
1912	£463 12	3			
1913	£684 16	7			
Total	£1,568 7	3			

West Malling.—Dry Scavenging in this parish has been carried out by Contract in a satisfactory manner; the houses are scavenged every 14 days. I reported last year that weekly scavenging would be a great improvement.

I submit summary showing quantity of refuse removed during the past 3 years, together with cost of same.

SUMMARY: -

	Year.	Quanti	Quantity. Cos			thomas de
	1911	738 Loads	•••••	£ 125	s. 0	d. 0
	1912	712 Loads	•••••	110	0	0
	1913	634 Loads	••••••	115	0	0
Classes.	Totals	2,084 Loads		350	0	0

Although a less number of loads of refuse has been returned, a larger cart has been used in collecting the refuse.

Outfall Works.—These works are controlled by the West Malling Sanitary Committee, and managed by me under their instructions. The sewage is raised from three low-level pumping stations, i.e., Swan Street, St. Leonard's Street and London Road to the high-level sewer, which delivers the sewage to the Council's Outfall Works in the parish of Ryarsh. The sewage is first treated in septic tank, and after passing through triple filter beds, the filtrate which is satisfactory passes into stream. The filter beds are worked in two sections, having an alternate rest of 14 days. The beds are dug over during the resting period, which keeps them in a state of efficiency.

The cost of working the outfall for the year was £17 11s. The cost includes digging of filter beds, clearing sludge from septic tanks, and emptying detritus chambers.

The cost for the past three years has been:

Year.	Cost.
1911	£17 1 2
1912	£18 14 11
1913	£17 11 0
Total	£53 7 1

The ground adjoining outfall works is let at a rental of £5 per annum, the Council reserving right for deposit of sludge, and overflow for storm water.

### SLAUGHTERHOUSES-

I have during the year visited the various Slaughterhouses in the district and on four occasions called upon the occupiers to cleanse and limewhite their premises (this is the same number as in the previous year) on re-inspecting the slaughterhouses I found the necessary work had been carried out. It was only necessary to serve informal notice in each case.

# DAIRIES AND COWSHEDS.

I have during the year visited and inspected the various Cowsheds and Dairies in the district (in all cases the cows are turned out all the year round). I have served informal notice on the occupiers of premises to cleanse and limewhite 3 cowsheds (the same number as last year) also in respect to 3 dairies as against 2 in the previous year, on re-inspecting the premises I found that the necessary work had been satisfactorily carried out. There are 55 cow-keepers and purveyors of milk on the register as against 57 in the previous year.

# FACTORIES AND WORKSHOPS-

I have, during the year, made 339 inspections, 259 workshops and 80 factories under the Act, and have called upon the occupiers of 10 bakehouses to cleanse and limewhite their premises, as against 11 in the previous year; also upon the owner of 1 bakehouse to reconstruct floor and repair walls, and upon the owners of 1 workshop, and 1 factory to provide sufficient privy accommodation, and upon the owner of 1 factory to provide efficient means of escape in case of fire, and 1 case of dirty and overcrowded workshop; informal notices only were served in each case and on re-inspection the defects were remedied. I herewith submit a summary of defects:—

#### SUMMARY.

Bakehouses—					
Dirty Bakehouses	• • •	• • •	• • •	• • •	10
Defective Flooring	• • •	• • •	• • •	• • •	1
Defective Walls	• • •	• • •	• • •	• • •	1
SHOEMAKER'S SHOP	7 7				71
Dirty and Overcrow	ded	• • •	• • •	• • •	7
Laundry-					
Insufficient Privy	Acco	mmod	lation	for	_
Separate Sexes	• • •	• • •		• • •	1

### FACTORIES—

Insufficient and Ill-constructed Privy	
Accommodation at Engineering Works	
and Mill	1
Insufficient Means of Escape in Case of	
Fire at Printing Works	1.
Matal	7.0
Total	16

During the year I have registered 2 workshops. There are now on the Register 20 Factories and 113 Workshops. A German sausage factory and one dressmaker's workshop have been closed.

# HOP-PICKERS' DWELLINGS, &c.

In August I visited with your Medical Officer of Health the hopper settlements in the district, and on October 1st I made the following report to you. There are 44 hopper settlements in the district as follows:—

1 at Aylesford	with		emigrant	hoppers	and	their	dependants
1 at Ditton	,,	22	, ,	, ,	,,	, ,	,,
4 at East Malling	9 9	1098	7.7	1 2	, ,	, ,	, ,
2 at West Malling	, ,	210	2.3	,,	2.2	, ,	2 2
1 at Ightham	, ,	92	, ,	, ,	, ,	, ,	, ,
1 at Leybourne	,,	50	,,	,,	, ,	,,	2.2
3 at Offham	, ,	990	, ,	, ,	2 2	, ,	2 2
1 at Ryarsh	,,	200	, ,	,,	, ,	, ,	, ,
1 at Mereworth	,,	280	, ,	,,	,,	,,	, ,
23 at East Peckham	, ,	2537	, ,	,,	2 2	9 2	, ,
6 at Wateringbury	,,	1342	,,	, ,	, ,	, ,	, ,

Making a total of 6,861 adults and I estimate there were at least 12,000 children making a total of 18,861 emigrants in the district.

The recommendations made by your Medical Officer of Health have been fairly well carried out, although many cookhouses and sanitary conveniences have been only of a temporary character. Many of the growers have promised buildings of a more permanent character next year. I would therefore suggest that a circular letter be sent to each hop grower in the early part of the year in respect to these matters so that plenty of time may be allowed to carry out the works before their busy season of haying, fruiting, etc., commences.

We had rain on seven days, and the Assistant Inspector and I visited the different encampments on the wet nights and found leaky tents on the following settlements:—

Church Farm, Offham; 6 tents leaky. On subsequent visits I found that clean dry bedding had been provided and extra firing supplied. Nothing further had been done. I saw the hopgrower's representative, who stated that he had no more tents, but had offered to put hop-pickers in the big barn near the Church, but they preferred remaining in the tents.

Godwell Farm, Offham: 4 tents leaky, which were taken down and other accommodation provided the following morning.

Aldon's Farm, Ryarsh: 3 tents leaky. These were made satisfactory, and clean, dry bedding and firing provided.

Hermitage Farm, Wateringbury: Two leaky tents. Clean, dry bedding and firing provided.

Beltring Farm, East Peckham: 12 leaky tents, 5 tents replaced and clean, dry bedding provided. Other tents not very bad, water soaking through by bedding being pressed against canvas of tents. I found the tents occupied by a large number of women and children, which in my opinion is very unsatisfactory. There is no hope to keep the tents watertight, as the occupants have no idea as to the proper management of the tents, and where there are two families in one tent, which is often the case, and a sheep gate is put in for screening purposes, makes matters worse. On the whole, however, the tents were better than in previous wet seasons. I still think that other provision in place of tents should be provided for the housing of women and children.

It was only in one or two cases necessary to call attention to the scavenging and then it was attended to at once—this shows a decided improvement, there was, of course, a considerable amount of litter and I consider the growers kept the settlements fairly satisfactory under difficult conditions.

The water supply was satisfactory, only in one case the hoppickers had to go a quarter-of-a-mile to obtain a satisfactory supply, the well at the settlement being closed in consequence of it being polluted, where the water was found to be unsatisfactory at the other settlements water was carted to them. The following shows means of water supply:—

Mid Kent Company supplied 19 Settlements Wells ,, 17 ,, Springs ,, 8 ,,

Total 44

The food supply was generally satisfactory with the exception of 272 loaves of bread which I seized at Wateringbury, on the evening of the 18th September. I took the bread to the Medical Officer of Health and afterwards obtained Magistrate's order to destroy same. A summons was issued and defendant was fined 20s. and costs, £2 19s. 9d. in all.

During the hopping season the Assistant and myself thoroughly examined most of the food supply imported into the district by hawkers and others.

There was a suspected case of scarlet fever removed to the Isolation Hospital for observation from the Little Hoppers Hospital, Wateringbury. The Assistant Inspector of Nuisances, Mr. C. Couch, took up his duties on August 25th, and he continuously visited the hopper settlements, also inspected the food supplies, and he carried out his duties in every way satisfactorily for the four weeks he was appointed.

# CANAL BOATS ACTS.

During the year I have visited and revisited the various wharves and sidings in the districts and have inspected 9 vessels and found them clean and well kept, and in no cases did I find any women or children on board the boats and no infectious cases were reported.

# NEW STREETS AND BUILDINGS.

During the year I submitted to the Plans Committee for their consideration 56 plans, as against 60 plans in the previous year. Your Committee recommended 55 plans for approval and referred one plan back for more particulars and block plan, this was supplied and the plan approved.

The following particulars give the class of buildings for which plans were submitted and approved.

### SUMMARY:-

~	0 11111				
Houses	• • •	• • •	• • •		9
Cottages		• • •	• • •	• • •	28
Bungalows		• • •	• • •		2
Additions to House	es	• • •	• • •		7
" " Cottag		• • •	• • •	• • •	9
" " Schoo		• • •	• • •		1
", ", Farms		• • •	• • •	• • •	4
and the same of th	• • •	• • •	• • •	• • •	2
Factories		• • •	• • •	• • •	2
Addition to Factori	es	• • •	• • •	• • •	1
Shops	• • •	• • •	• • •	• • •	3
Addition to Shops	• • •	• • •	• • •	• • •	1
Offices	• • •	• • •	• • •	• • •	3
Motor Garage	• • •	• • •	• • •	• • •	1
Cowsheds	• • •	• • •	• • •	• • •	1
Slaughterhouse	• • •	• • •	• • •	• • •	Т
		То	tal		77
		10	1801	• • •	77

77 Buildings as compared with 64 in 1912.

I have the honour to remain, Gentlemen,

Your obedient servant,

CHARLES SOUTER.